



TORQ Analysis of Hoist and Winch Operators to Sawing Machine Setters, Operators, and Tenders, Wood

INPUT SECTION:

| Transfer | Title | O*NET | Filters | | |
|--------------------|--|------------|------------|----------------------|-----------|
| From Title: | Hoist and Winch Operators | 53-7041.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Sawing Machine Setters, Operators, and Tenders, Wood | 51-7041.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

OUTPUT SECTION:

Grand TORQ:

84

| Ability TORQ | | | | Skills TORQ | | | | Knowledge TORQ | | | |
|----------------------------|-------|-----|------|-----------------------------|-------|-----|------|---------------------------------|-------|-----|------|
| Level | | | 87 | Level | | | 85 | Level | | | 79 |
| Gaps To Narrow if Possible | | | | Upgrade These Skills | | | | Knowledge to Add | | | |
| Ability | Level | Gap | Impt | Skill | Level | Gap | Impt | Knowledge | Level | Gap | Impt |
| Arm-Hand Steadiness | 48 | 11 | 72 | No Skills Upgrade Required! | | | | No Knowledge Upgrades Required! | | | |
| Near Vision | 46 | 7 | 62 | | | | | | | | |
| Oral Expression | 48 | 7 | 56 | | | | | | | | |
| Deductive Reasoning | 39 | 5 | 50 | | | | | | | | |
| Trunk Strength | 41 | 4 | 53 | | | | | | | | |
| Category Flexibility | 41 | 4 | 50 | | | | | | | | |
| Finger Dexterity | 42 | 3 | 59 | | | | | | | | |
| Manual Dexterity | 42 | 3 | 56 | | | | | | | | |
| Inductive Reasoning | 39 | 2 | 50 | | | | | | | | |
| Selective Attention | 41 | 2 | 50 | | | | | | | | |
| Problem Sensitivity | 42 | 1 | 53 | | | | | | | | |
| Speech Clarity | 35 | 1 | 50 | | | | | | | | |

LEVEL and IMPT (IMPORTANCE) refer to the Target Sawing Machine Setters, Operators, and Tenders, Wood. GAP refers to level difference between Hoist and Winch Operators and Sawing Machine Setters, Operators, and Tenders, Wood.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50



| Description | Hoist and Winch Operators | Sawing Machine Setters, Operators, and Tenders, Wood | Importance |
|---|---------------------------|--|------------|
| Arm-Hand Steadiness | 37 | 48 | 72 |
| Control Precision | 55 | 50 | 72 |
| Near Vision | 39 | 46 | 62 |
| Finger Dexterity | 39 | 42 | 59 |
| Oral Comprehension | 51 | 48 | 56 |
| Oral Expression | 41 | 48 | 56 |
| Manual Dexterity | 39 | 42 | 56 |
| Problem Sensitivity | 41 | 42 | 53 |
| Multilimb Coordination | 51 | 46 | 53 |
| Trunk Strength | 37 | 41 | 53 |
| Deductive Reasoning | 34 | 39 | 50 |
| Inductive Reasoning | 37 | 39 | 50 |
| Category Flexibility | 37 | 41 | 50 |
| Selective Attention | 39 | 41 | 50 |
| Rate Control | 37 | 34 | 50 |
| Speech Clarity | 34 | 35 | 50 |
| Skill Level Comparison - Abilities with importance scores over 69 | | | |
| Description | Hoist and Winch Operators | Sawing Machine Setters, Operators, and Tenders, Wood | Importance |
| Operation and Control | 73 | 53 | 71 |
| Knowledge Level Comparison - Knowledge with importance scores over 69 | | | |
| Description | Hoist and Winch Operators | Sawing Machine Setters, Operators, and Tenders, Wood | Importance |

| Experience & Education Comparison | | | | | |
|------------------------------------|---------------------------|--|-------------------------------------|---------------------------|--|
| Related Work Experience Comparison | | | Required Education Level Comparison | | |
| | | Sawing Machine Setters, Operators, and Tenders, Wood | | | Sawing Machine Setters, Operators, and Tenders, Wood |
| Description | Hoist and Winch Operators | | Description | Hoist and Winch Operators | |
| 10+ years | 2% | <div><div></div></div> 1% | Doctoral | 0% | 0% |
| 8-10 years | 0% | <div><div></div></div> 0% | Professional Degree | 0% | 0% |
| 6-8 years | 0% | <div><div></div></div> 0% | Post-Masters Cert | 0% | 0% |
| 4-6 years | 21% | <div><div></div></div> 0% | Master's Degree | 0% | 0% |
| 2-4 years | 21% | <div><div></div></div> 8% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 29% | <div><div></div></div> 11% | Bachelors | 0% | 0% |
| 6-12 months | 9% | <div><div></div></div> 13% | AA or Equiv | 0% | 0% |
| 3-6 months | 1% | <div><div></div></div> 12% | Some College | 8% | <div><div></div></div> 1% |
| | | | Post-Secondary Certificate | 23% | <div><div></div></div> 10% |



| | | | | | |
|---|-----|-----|---|-----|-----|
| 1-3 months | 1% | 12% | High School Diploma or GED | 41% | 40% |
| 0-1 month | 0% | 11% | No HSD or GED | 26% | 48% |
| None | 12% | 29% | | | |
| Hoist and Winch Operators | | | Sawing Machine Setters, Operators, and Tenders, Wood | | |
| Most Common Educational/Training Requirement: | | | | | |
| Moderate-term on-the-job training | | | Moderate-term on-the-job training | | |
| Job Zone Comparison | | | | | |
| 2 - Job Zone Two: Some Preparation Needed | | | 2 - Job Zone Two: Some Preparation Needed | | |
| Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty. | | | Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty. | | |
| These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed. | | | These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed. | | |
| Employees in these occupations need anywhere from a few months to one year of working with experienced employees. | | | Employees in these occupations need anywhere from a few months to one year of working with experienced employees. | | |

Tasks

Hoist and Winch Operators

Core Tasks

Generalized Work Activities:

- Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

Specific Tasks

Occupation Specific Tasks:

- Apply hand or foot brakes and move levers to lock hoists or winches.
- Attach, fasten, and disconnect cables or lines to loads, materials, and equipment, using hand tools.
- Climb ladders in order to position and setup vehicle-mounted derricks.

Sawing Machine Setters, Operators, and Tenders, Wood

Core Tasks

Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

Specific Tasks

Occupation Specific Tasks:

- Adjust bolts, clamps, stops, guides, and table angles and heights, using hand tools.
- Adjust saw blades, using wrenches and rulers, or by turning handwheels or pressing pedals, levers, or panel buttons.



- Move levers, pedals, and throttles in order to stop, start, and regulate speeds of hoist or winch drums in response to hand, bell, buzzer, telephone, loud-speaker, or whistle signals, or by observing dial indicators or cable marks.
- Move or reposition hoists, winches, loads and materials, manually or using equipment and machines such as trucks, cars, and hand trucks.
- Observe equipment gauges and indicators and hand signals of other workers in order to verify load positions and/or depths.
- Oil winch drums so that cables will wind smoothly.
- Operate compressed air, diesel, electric, gasoline, or steam-driven hoists or winches in order to control movement of cableways, cages, derricks, draglines, loaders, railcars, or skips.
- Repair, maintain, and adjust equipment, using hand tools.
- Select loads or materials according to weight and size specifications.
- Signal and assist other workers loading or unloading materials.
- Start engines of hoists or winches and use levers and pedals to wind or unwind cable on drums.
- Tend auxiliary equipment such as jacks, slings, cables, or stop blocks, in order to facilitate moving items or materials for further processing.

Detailed Tasks

Detailed Work Activities:

- inspect material moving equipment
- load, unload, or stack containers, materials, or products
- maintain or repair construction machinery or equipment
- operate cargo handling gear
- operate hoist, winch, or hydraulic boom
- operate material moving, loading, or unloading equipment
- perform safety inspections in construction or resource extraction setting
- set up specialized rigging
- use hand or power tools
- use measuring devices in construction or extraction work

- Clear machine jams, using hand tools.
- Count, sort, and stack finished workpieces.
- Cut grooves, bevels, and miters, saw curved or irregular designs, and sever or shape metals, according to specifications or work orders.
- Dispose of waste material after completing work assignments.
- Examine blueprints, drawings, work orders, or patterns to determine equipment set-up and selection details, procedures to be used, and dimensions of final products.
- Examine logs or lumber in order to plan the best cuts.
- Guide workpieces against saws, saw over workpieces by hand, or operate automatic feeding devices to guide cuts.
- Inspect and measure workpieces to mark for cuts and to verify the accuracy of cuts, using rulers, squares, or caliper rules.
- Inspect stock for imperfections and to estimate grades or qualities of stock or workpieces.
- Lubricate and clean machines, using wrenches, grease guns, and solvents.
- Measure and mark stock for cuts.
- Monitor sawing machines, adjusting speed and tension and clearing jams to ensure proper operation.
- Mount and bolt sawing blades or attachments to machine shafts.
- Operate panelboards of saw and conveyor systems to move stock through processes, and to cut stock to specified dimensions.
- Position and clamp stock on tables, conveyors, or carriages, using hoists, guides, stops, dogs, wedges, and wrenches.
- Pull tables back against stops, and depress pedals to advance cutterheads that shape stock ends.
- Select saw blades, types and grades of stock, and cutting procedures to be used, according to work orders or supervisors' instructions.
- Set up, operate, or tend saws and machines that cut or trim wood to specified dimensions, such as circular saws, band saws, multiple-blade sawing machines, scroll saws, rip saws, and crozer machines.
- Sharpen blades or replace defective or worn blades and bands, using hand tools.
- Trim lumber to straighten rough edges and remove defects, using circular saws.
- Unclamp and remove finished workpieces from tables.
- Unload and roll logs from trucks to sawmill decks or to carriages, or move logs in ponds, using pike poles.



Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- fell or buck trees
- grade, classify, or sort products according to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- measure, weigh, or count products or materials
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate woodworking equipment/machinery
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize wood species characteristics
- set up production equipment or machinery
- sort manufacturing materials or products
- understand technical operating, service or repair manuals
- use chain saws
- use fire suppression equipment
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

| Description | Hoist and Winch Operators | Sawing Machine Setters, Operators, and Tenders, Wood | Difference |
|----------------------|---------------------------|--|------------|
| Median Wage | N/A | \$ 24,790 | N/A |
| 10th Percentile Wage | N/A | \$ 18,890 | N/A |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | N/A | \$ 29,970 | N/A |



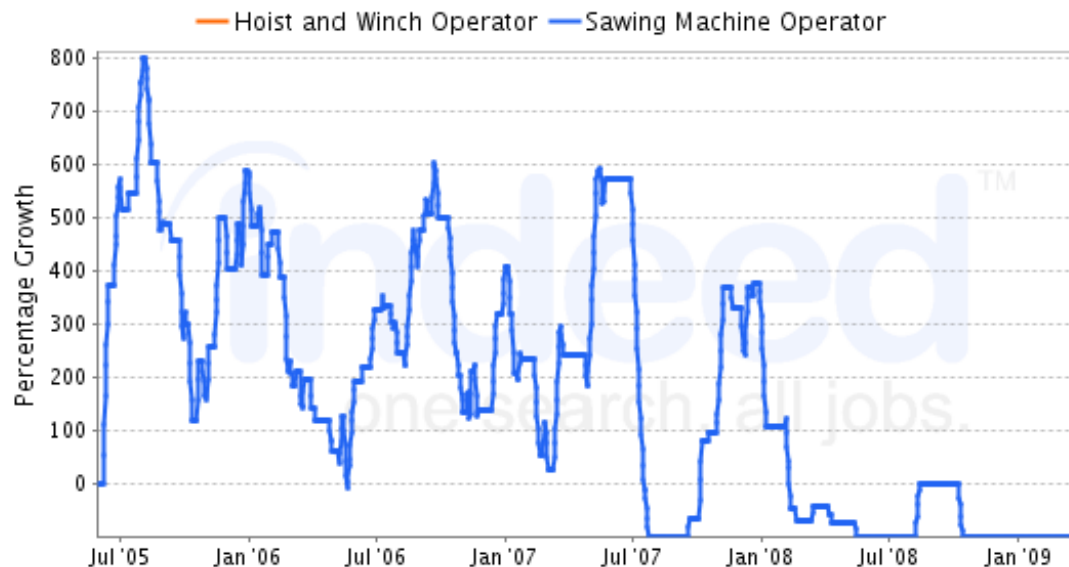
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|---------------------------------------|-----|-----------|-----|
| 90th Percentile Wage | N/A | \$ 35,380 | N/A |
| Mean Wage | N/A | \$ 25,920 | N/A |
| Total Employment - 2007 | N/A | 700 | N/A |
| Employment Base - 2016 | N/A | 765 | N/A |
| Projected Employment - 2016 | N/A | 706 | N/A |
| Projected Job Growth - 2006-2016 | N/A | -7.7 % | N/A |
| Projected Annual Openings - 2006-2016 | N/A | 15 | N/A |

National Job Posting Trends

Trend for Hoist and Winch Operators

Trend for
Sawing
Machine
Setters,
Operators,
and
Tenders,
Wood

Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

Recommended Programs

Cabinet Maker and Millworker

Cabinetmaking and Millwork/Millwright. A program that prepares individuals to apply technical knowledge and skills to set up, operate and repair industrial woodworking machinery, and to use such machinery to design and fabricate wooden components and complete articles.

No schools available for the program

Maine Statewide Promotion Opportunities for Hoist and Winch Operators



| O*NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings |
|------------|--|------------|----------|------------|-------------|-------------|--------|---------------------|
| 53-7081.00 | Refuse and Recyclable Material Collectors | 85 | 2 | 930 | \$22,780.00 | \$22,780.00 | 1% | 37 |
| 47-2071.00 | Paving, Surfacing, and Tamping Equipment Operators | 84 | 2 | 320 | \$25,520.00 | \$25,520.00 | 1% | 7 |
| 51-7041.00 | Sawing Machine Setters, Operators, and Tenders, Wood | 84 | 2 | 700 | \$24,790.00 | \$24,790.00 | -8% | 15 |
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 84 | 2 | 910 | \$38,230.00 | \$38,230.00 | -26% | 23 |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 83 | 2 | 1,610 | \$38,030.00 | \$38,030.00 | 7% | 49 |
| 51-9191.00 | Cementing and Gluing Machine Operators and Tenders | 83 | 1 | 80 | \$27,620.00 | \$27,620.00 | -15% | 2 |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 83 | 3 | 140 | \$37,470.00 | \$37,470.00 | 2% | 4 |
| 53-7021.00 | Crane and Tower Operators | 83 | 3 | 240 | \$41,940.00 | \$41,940.00 | -2% | 4 |
| 51-9041.00 | Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders | 82 | 2 | 260 | \$28,330.00 | \$28,330.00 | -7% | 5 |
| 53-7032.00 | Excavating and Loading Machine and Dragline Operators | 82 | 2 | 330 | \$32,160.00 | \$32,160.00 | 6% | 8 |
| 37-3011.00 | Landscaping and Groundskeeping Workers | 82 | 1 | 4,040 | \$24,450.00 | \$24,450.00 | 12% | 130 |
| 43-5041.00 | Meter Readers, Utilities | 82 | 1 | 90 | \$31,240.00 | \$31,240.00 | -11% | 3 |
| 51-7042.00 | Woodworking Machine Setters, Operators, and Tenders, Except Sawing | 82 | 2 | 900 | \$23,040.00 | \$23,040.00 | -12% | 23 |
| 51-9122.00 | Painters, Transportation Equipment | 81 | 2 | 320 | \$32,230.00 | \$32,230.00 | 2% | 8 |
| 47-4051.00 | Highway Maintenance Workers | 81 | 2 | 2,210 | \$28,790.00 | \$28,790.00 | 7% | 60 |



Top Industries for Sawing Machine Setters, Operators, and Tenders, Wood

| Industry | NAICS | % in Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Other wood product manufacturing | 321900 | 26.55% | 17,269 | 17,901 | 3.66% |
| Sawmills and wood preservation | 321100 | 25.90% | 16,845 | 14,856 | -11.81% |
| Veneer, plywood, and engineered wood product manufacturing | 321200 | 12.25% | 7,969 | 9,546 | 19.78% |
| Self-employed workers, primary job | 000601 | 7.11% | 4,624 | 5,419 | 17.19% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 5.97% | 3,881 | 4,726 | 21.79% |
| Household and institutional furniture manufacturing | 337120 | 5.22% | 3,395 | 2,842 | -16.30% |
| Office furniture (including fixtures) manufacturing | 337200 | 3.32% | 2,159 | 2,233 | 3.43% |
| Lumber and other construction materials merchant wholesalers | 423300 | 2.03% | 1,317 | 1,664 | 26.35% |
| Building material and supplies dealers | 444100 | 1.42% | 922 | 1,296 | 40.57% |
| Employment services | 561300 | 1.09% | 708 | 985 | 39.22% |
| Self-employed workers, secondary job | 000602 | 0.90% | 584 | 640 | 9.51% |
| Motor vehicle parts manufacturing | 336300 | 0.25% | 163 | 143 | -12.42% |
| Motor vehicle body and trailer manufacturing | 336200 | 0.24% | 157 | 169 | 7.63% |
| Management of companies and enterprises | 551100 | 0.12% | 80 | 102 | 26.80% |

Top Industries for Hoist and Winch Operators

| Industry | NAICS | % in Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Support activities for water transportation | 488300 | 9.78% | 295 | 342 | 15.75% |
| Logging | 113310 | 8.08% | 244 | 201 | -17.33% |
| Electric power generation, transmission and distribution | 221100 | 6.64% | 200 | 184 | -8.03% |
| Support activities for road transportation | 488400 | 6.46% | 195 | 214 | 9.96% |
| Cement and concrete product manufacturing | 327300 | 4.04% | 122 | 132 | 8.55% |
| Sawmills and wood preservation | 321100 | 3.60% | 109 | 87 | -19.82% |
| Support activities for mining | 213100 | 2.85% | 86 | 81 | -5.93% |
| Nonmetallic mineral mining and quarrying | 212300 | 2.04% | 62 | 66 | 7.34% |
| Local government, excluding education and hospitals | 939300 | 2.03% | 61 | 69 | 12.33% |